## **AMENDMENTS TO THE CLAIMS:**

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

## **LISTING OF CLAIMS:**

- 1-13. (Canceled).
- 14. (Currently Amended) A control unit comprising:
  - a housing;
  - a processor situated in the housing; and
  - at least one inertial sensor situated in the housing,
- wherein a data transmission between the processor and the at least one inertial sensor is digital, and

wherein the data transmission is configured in such a way that transmitted data has at least one error bit and at least one status bit.

- 15. (Previously Presented) The control unit according to claim 14, further comprising a serial synchronous interface for providing the data transmission.
- 16. (Canceled).
- 17. (Previously Presented) The control unit according to claim 14, wherein the data transmission is configured to be bidirectional.
- 18. (Previously Presented) The control unit according to claim 14, wherein the data transmission is configured for triggering a sensor test.
- 19. (Currently Amended) The control unit according to claim 14, wherein the data transmission is configured for triggering [[an]] <u>a sensor-internal</u> offset regulation of the at least one inertial sensor.

U.S. Patent Application No. 10/524,702 Attorney Docket No. 10191/4158 Response to Office Action of January 31, 2007

20. (Previously Presented) The control unit according to claim 14, wherein four lines are provided for the data transmission, one of the lines being for selecting the at least one inertial

sensor.

21. (Currently Amended) The control unit according to claim 14, wherein the at least one

inertial sensor has a multi-channel design.

22. (Previously Presented) The control unit according to claim 14, wherein the data

transmission is configured for triggering a switch-over from one operating state to another

operating state of the at least one inertial sensor.

23. (Previously Presented) The control unit according to claim 14, wherein the control

unit is part of a restraint system.

24. (Previously Presented) The control unit according to claim 14, wherein the control

unit is part of a vehicle dynamics control system.

25. (Previously Presented) The control unit according to claim 14, wherein the control

unit is part of one of a sensor box and a sensor cluster.

26. (Previously Presented) The control unit according to claim 14, wherein the control

unit is part of a vehicle navigation system.

27. (New) The control unit according to claim 14, wherein the status bit indicates an

operating state of the at least one inertial sensor.

28. (New) The control unit according to claim 14, wherein status bit indicates a running

sensor test.

29. (New) The control unit according to claim 14, wherein the status bit indicates an

offset regulation mode.

3

U.S. Patent Application No. 10/524,702 Attorney Docket No. 10191/4158 Response to Office Action of January 31, 2007

30. (New) The control unit according to claim 14, wherein the status bit indicates an initialization phase.